Missouri Department of Natural Resources

Total Maximum Daily Load Information Sheet

For Streams with Aquatic Habitat Loss Impairment

Waterbody Segment at a Glance:

Location: Streams in Northern and West Central Missouri and in the Mississippi Embayment of Southeast Missouri and the Missouri and Mississippi Rivers.

Impairment: Impairments (pollutants) presently listed as "sediment" on 38 stream segments on the 1998 303(d) list are **proposed** to have the **pollutant changed** to "habitat loss." There are nine others listed for habitat loss on the 1998 list and three additional streams are proposed for the 2002 303(d) list with this impairment.

Description of the Problem

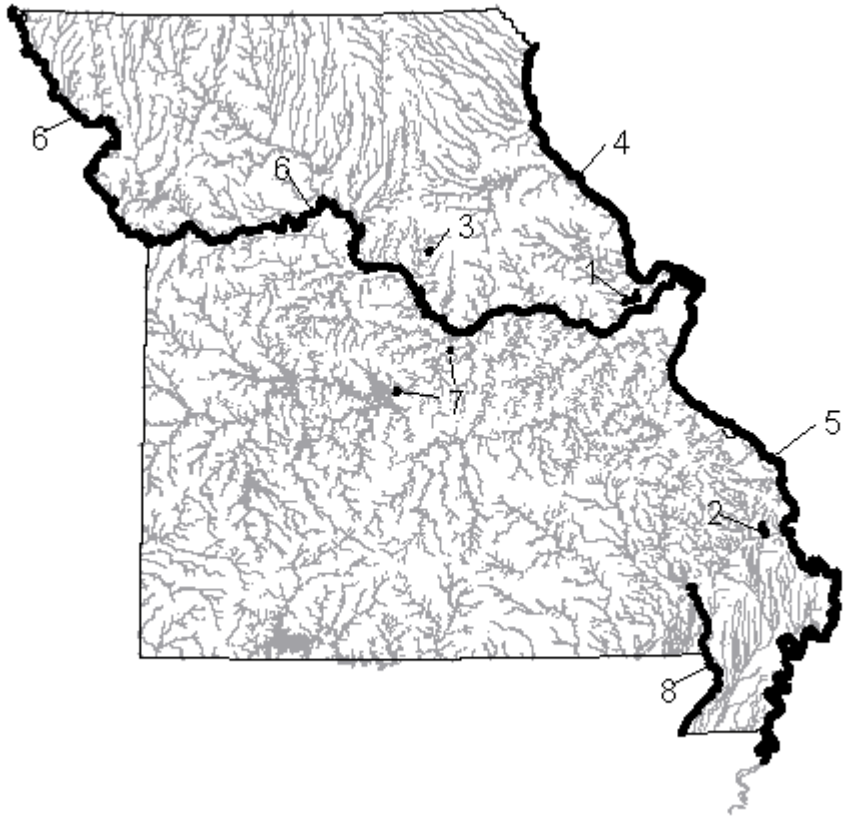
All of these waters, as per Missouri Water Quality Standards, must provide a suitable home for aquatic life. A combination of natural geology and land use in the prairie portions of the state and the Mississippi Embayment is believed to have reduced the amount and impaired the quality of aquatic habitat. The major problems are excessive rates of sediment deposition due to streambank erosion and sheet erosion from agricultural lands, loss of stream length and loss of stream channel heterogeneity due to channelization, and changes in basin hydrology that have increased flood flows and prolonged low flow conditions. Loss of tree cover in riparian zones has caused elevated water temperatures in summer and a reduction in woody debris, a critical aquatic habitat component in prairie streams. The most compelling evidence of loss or impairment of aquatic habitat is the historical change in distribution of fishes in Missouri. Many species of fish no longer appear in portions of the state where they once lived.

Pollutants presently listed as "sediment" on 38 stream segments are proposed to have the pollutant changed to "habitat loss." This change is proposed because sediment is often an important, but certainly not the only, pollutant or condition causing degradation of aquatic habitat in these streams. With this proposed change, other problems such as channelization, alteration of streambanks and riparian zones, and alteration of normal flow regimes would be included as conditions contributing to impairment.

Missouri Streams with Loss of Habitat due to Agricultural Non-Point Source Pollution

#	Waterbody	County (lower section)	Miles affected		#	Waterbody	County (lower section)	Miles affected
1	3rd Fork Platte River	Buchanan	31.5		20	Long Branch	Nodaway	6
2	Big Creek	Henry	49		21	M. Fork Grand River	Gentry	25
3	Big Muddy Creek	Daviess	8		22	M. Fork Salt River	Monroe	49
4	Blackbird Creek	Adair	10.5		23	Marrowbone Creek	Daviess	11
5	Clear Creek	Vernon	18		24	Miami Creek	Bates	18
6	E. Fork Crooked Cr.	Ray	14		25	Mill Creek	Lincoln	4
7	E. Fork Grand River	Gentry	25		26	Mussel Fork	Macon	29
8	E. Fork Medicine Cr.	Grundy	36		27	N. Fabius River	Marion	82
9	Elkhorn Creek	Montgomery	19		28	N. Fork Spring River	Jasper	51.5
10	Flat Creek	Pettis	20		29	North River	Marion	40
11	Grindstone Creek	DeKalb	16		30	Old Channel Little R.	New Madrid	20
12	Honey Creek	Livingston	23		31	S. Fork Blackwater R.	Johnson	5
13	Honey Creek	Nodaway	8.5		32	S. Wyaconda River	Clark	9
14	Little Drywood Creek	Vernon	17		33	Spillway Ditch	New Madrid	13.5
15	Little Medicine Creek	Grundy	40		34	Spring Creek	Adair	18
16	Little Tarkio Creek	Holt	17.5		35	Troublesome Creek	Marion	3.5
17	Lake Creek	Pettis	5		36	W. Fork Big Creek	Harrison	18
18	Lateral #2 Main Ditch	Stoddard	11.5		37	W. Fork Locust Creek	Linn	17
19	Locust Creek	Chariton	84		38	White Cloud Creek	Andrew	11

Missouri Streams with Loss of Habitat due to Channelization and Other Causes



#	Waterbody	County (lower section)	Miles affected	Cause of Habitat Loss
1	Dardenne Creek	St. Charles	10	Urban/Rural Non-Point Source
2	Hubble Creek	Cape Girardeau	7	Channelization
3	Kelley Branch	Boone	1	Off Road Vehicles
4	Mississippi River (upper)	St. Charles	165	Channelization and Inundation
5	Mississippi River (lower)	Pemiscot	124.5	Channelization
6	Missouri River	St. Louis	533	Channelization
7	Osage River	Cole	0.4	Sand and Gravel Operations
8	St. Francis River	Dunklin	128	Channelization

For more information call or write:

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